

Title (en)

Speed reduction mechanism and motor torque transmission device including the speed reduction mechanism

Title (de)

Geschwindigkeitsreduzierungsmechanismus und Motordrehmomentübertragungsvorrichtung mit dem Geschwindigkeitsreduzierungsmechanismus

Title (fr)

Mécanisme de réduction de vitesse et dispositif de transmission de couple moteur comprenant le mécanisme de réduction de vitesse

Publication

EP 2538114 A3 20130327 (EN)

Application

EP 12172999 A 20120621

Priority

JP 2011140613 A 20110624

Abstract (en)

[origin: EP2538114A2] A reduction-transmission mechanism (1) includes: an input member (50) formed of an external gear (50c) that makes circular motion with an eccentric amount; a rotation force applying member (52) formed of an internal gear that is in mesh with the input member; and output members (53) that receive and output rotation force applied to the input member by the rotation force applying member, and that are passed through the respective pin insertion holes (50b). Each of the output members is provided with a needle roller bearing (55) at a portion that is able to contact an inner periphery, which defines a corresponding one of the through-holes, and the input member has third oil supply passages (642) that extend from the center hole to the pin insertion holes, and lubricating oil is supplied to the needle roller bearings through the third oil supply passages by centrifugal force generated in accordance with rotation of the motor shaft.

IPC 8 full level

F16H 1/32 (2006.01); **F16H 57/04** (2010.01)

CPC (source: EP US)

B60K 17/356 (2013.01 - EP US); **B60L 50/16** (2019.01 - EP US); **F16H 1/32** (2013.01 - EP US); **F16H 57/0428** (2013.01 - EP US); **F16H 57/043** (2013.01 - EP US); **B60K 2001/001** (2013.01 - EP US); **B60L 2240/486** (2013.01 - EP US); **B60L 2260/28** (2013.01 - EP US); **F16H 2001/325** (2013.01 - EP US); **Y02T 10/70** (2013.01 - US); **Y02T 10/7072** (2013.01 - EP US)

Citation (search report)

- [XY] JP 2010169247 A 20100805 - NTN TOYO BEARING CO LTD
- [X] JP 2011033113 A 20110217 - NTN TOYO BEARING CO LTD
- [YA] EP 2292946 A1 20110309 - NTN TOYO BEARING CO LTD [JP]
- [A] JP 2006029393 A 20060202 - NABTESCO CORP

Cited by

WO2014105314A3

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2538114 A2 20121226; **EP 2538114 A3 20130327**; CN 102840314 A 20121226; JP 2013007443 A 20130110; US 2012329597 A1 20121227

DOCDB simple family (application)

EP 12172999 A 20120621; CN 201210211928 A 20120621; JP 2011140613 A 20110624; US 201213525547 A 20120618